

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



A49.9  
R31A  
cop. 2



Dairy-Herd-Improvement Letter

ARS-44-77  
(Vol. 36, No. 5)

May 1960

### NEW DHIA PROVED-SIRE RECORD

Automation is now being used to compile for U. S. dairy farmers the most complete and reliable proved-sire records possible. The new proved-sire records include summary data on parentally unrelated stallmates or contemporaries of daughters, as well as yearly herd average data for the approximate period of each daughters' lactation record. When available, information on the amount of feed that is fed the dams and daughters is also included.

The proved-sire records when compiled include all the usable dam-and-daughter production data ever reported. In other words, as of the date the record is tabulated it is complete and up-to-date.

On the following page is a sample of the new proved-sire record using assimilated data. These new proved-sire records will soon be produced in volume as every DHIA sire that can be proved or re-proved will be proved or re-proved on an up-to-date basis.

*Errata: In January 1960 letter on page 2 delete footnote 3.*

# DHIA PROVED SIRE RECORD FOR HOLSTEIN BREED

999999 SAMPLE PROVED SIRE RECORD

BORN. 6-15-49 SIRE. 808888 DAM. 777777

U. S. DEPT. OF AGRICULTURE - AGRICULTURAL RESEARCH SERVICE  
DAIRY CATTLE RESEARCH BRANCH - DAIRY HERD IMPROVEMENT SECTION

32-015 33-010 35-005

RECORDS FROM STATES

AB SERVICE 35-05 TABULATED 12-15-57 PREVIOUS TABULATION.

SUMMARY	IDENTIFICATION NUMBER	B	A	TYPE	DATE OF BIRTH	DAYS IN MILK	RECORDS	MILK	FAT	FEEDING	305 - DAY CONTEMPORARY			YEARLY HERD AVERAGE		
											RECORDS	MILK	FAT	RECORDS	MILK	FAT
14 NON-AB	DAU	-	-	85	-----	--	25	13902	3.8	97	25	13667	492	39	13889	500
13 NON-AB	DAU	-	-	85	-----	--	23	13864	3.8	96	25	13667	492	40	13861	499
13	DAMS	-	-	84	-----	--	36	13765	3.8	95	DIFF. ALL	DAU	6	HERD	DATA	
DIFF 12-08-12	-----	-	-	1	-----	--		99	.0	1	235	30			13	22
18 AB DAU	-----	-	-	85	-----	--	23	14025	3.6	98	24	14056	506	38	14306	515
17 AB DAU	-----	-	-	85	-----	--	21	14033	3.6	99	24	14056	506	41	14333	516
17 DAMS	-----	-	-	83	-----	--	31	13288	3.7	97	DIFF. ALL	DAU	6	HERD	DATA	
DIFF 11-10-12	-----	-	-	2	-----	--		745	.1-	2	31-	3			281-	6-
32 ALL DAU	-----	-	-	85	-----	--	48	13964	3.7	98	25	13861	499	37	14167	510
30 ALL DAU	-----	-	-	85	-----	--	44	13960	3.7	97	24	13889	500	40	14278	514
30 ALL DAMS	-----	-	-	84	-----	--	67	13495	3.7	96	DIFF. ALL	DAU	6	HERD	DATA	
DIFF 23-18-24	-----	-	-	1	-----	--		465	.0	1	103	17			203-	6
HERD CODE																
32500591	1855980	-	3	84	10-10-35	305	3	15806	3.3		32	15528	559	35	15667	564
32500591	3284006	A	3	82	10-10-50	305	1	15977	3.7							
32430860	2497395	-	3	80	7-31-44	302	3	16986	3.7		36	15667	564	36	16167	582
32500591	3272791	-	3	90	11-30-49	305	2	15870	4.1							
32430860	2497395	-	3	80	7-31-44	302	3	16986	3.7		32	13528	487	41	15033	570
32500533	3349862	A	3	81	11-28-50	305	2	18543	4.0							
32430860	2425344	-	3	86	12-18-41	291	6	12169	3.7		26	13654	483	39	14286	522
35640927	35AAB4269	-	3	90	7-24-50	301	2	14275	3.8							
33260865	2497390	-	3	80	6-30-44	302	2	16869	3.7		32	13528	487	41	15833	570
32500533	3546972	A	3	85	11-28-50	305	1	18549	4.0							
33260867	2395055	-	3	87	11-30-41	301	6	11674	3.6		25	13345	465	45	14542	475
33500534	3152765	A	3	90	8-29-48	305	1	9073	3.3							
35170985	2472904	-	3	87	11-29-43	295	7	12760	3.7		23	14167	493	35	14345	432
33160113	2923941	-	3	83	11-03-47	305	1	11421	3.7							
33180742	2472904	-	3	87	11-29-43	295	5	12760	3.7		27	14474	505	37	15142	512
35110643	2923342	-	3	85	11-03-47	305	5	13519	3.8							



NEW PROVED SIRE RECORD FORM for the sire 999999 gives the following information:

At the top of the form is the breed, registration number, name of sire, birth date, sire, and dam. The sire is in AB service (35-05) -- the "35" indicates Wisconsin and "5" is the stud number. Each State has a code number and each stud in the State is coded.

After "records from States" are listed the State from which data included in the sire record were received and the number of records from each State. For example, "32-015" indicates that 15 records included in the sire record were from Indiana.

In the top portion of the body of the form are summaries of the dam-and-daughter data of the sire.

The first summary is of non-AB daughters or a "natural proof." The sire had 14 non-AB daughters, 13 of which had dams with reported production records. The data "Diff. 12-08-12" indicates that 12 of the daughters excelled their dams in milk production, 8 excelled their dams in butterfat test, and 12 excelled their dams in butterfat production.

Type score ... The score "85" is the average type score of those daughters that have been officially classified; "84" is the average score of the dams.

Number of records averaged ... The 14 daughters, collectively, had 25 lactation records which were first averaged for each daughter to obtain the average production of all daughters. The 13 daughters with dams averaged 13,864 pounds of milk, testing 3.8 per cent butterfat, and 527 pounds of butterfat. Compared to the production of their dams, they excelled in milk production by 99 pounds and butterfat by 5 pounds.

When feed data are reported, a feeding index is calculated in an attempt to estimate the feed input to the daughters of the sire and to their dams. Amount of feed fed and feed requirements have been calculated on a net energy basis.

To obtain the index, estimated net energy fed has been divided by the total estimated requirement for maintenance and production.

Theoretically, a feeding index of less than 100 indicates the animals, as a group, were fed below requirements.

The average feed index for the daughters, as a group, and for dams, as a group, may be useful in indicating if feeding levels for the dams and daughters were comparable.

305-day contemporary herd average ... Data under this heading consist of the average production level of the paternally unrelated stablemates of the daughters that completed production records at the same time as the daughters.

The contemporary averages provide some indication of the average producing ability of the stablemates and the environmental conditions of the herd during the approximate period the lactation records of the daughters listed were made. In the above example they excelled their stablemates by 235 pounds of milk and 30 pounds of butterfat.

Yearly herd average ... Data under this heading indicate, on a cow-year basis, the yearly average production of the entire herd. These data may be used with the "contemporary average data" in appraising the environment of a herd.

For a few years, in some cases where uniform herd codes are not available to identify earlier lactation records by herds, yearly average may be the only herd data which can be included in a sire record.

As with the "contemporary average" the "yearly average" provides some indication of the producing ability of the herd, as a whole, and the environmental conditions of the herd during the approximate period the records of the daughters listed were made.

The yearly herd average is increased by 9 per cent that it may be more comparable to the standardized (mature equivalent) average data of the daughter data included in the record. In the example on page 2 the daughters of the sire excelled the adjusted herd average by 13 pounds of milk and 22 pounds of butterfat.

The explanation of the second summary of 18 AB daughters is the same as for the non-AB daughters. This summary includes only the records of daughters that are AB progeny.

In the lower part of the form, the individual dam-and-daughter comparisons are listed. The comparisons are listed by pairs. The data on the first line are for the dam of the daughter; the data on the second line are for the daughter.

In the first column is listed the herd code of the herd from which the lactation records were reported. The identification number of the dams and daughters is listed in the second column. If the dam or daughter is an AB progeny, it is indicated by an "A" in the third column.

The remainder of the data is explained by the column headings at the top of the form, with the exception of the column headed "CAR." This refers to conditions affecting record. If a production record is affected by the cow being injured, having mastitis, and so forth, a code indicating the conditions would be listed.

Individual dam-and-daughter comparisons up to 21 pairs will be listed in the proved sire record. After 21 comparisons have been listed for a sire, when the sire is reproved, only the summary data at the top of the form are printed.